## **CLAIMS**

- 1. A lead fixation tool comprising:
- a proximal portion having a tapered passage therethrough; and a distal portion having a channel in substantially axial alignment with the passage and having a lead pin engagement mechanism.
- 2. The lead fixation tool of claim 1, wherein the proximal portion and the distal portion form an integral housing.
- 3. The lead fixation tool of claim 1, wherein the proximal portion and the distal portion are rotatably coupled.
- 4. The lead fixation tool of claim 3, further comprising a bearing, wherein the bearing couples the distal portion and the proximal portion.
- 5. The lead fixation tool of claim 4, further comprising a rotation indicator.
- 6. The lead fixation tool of claim 5, wherein the rotation indicator includes:
  - a resilient arm having an actuator; and
- a detent, wherein rotation of the distal portion relative to the proximal portion causes the actuator to engage the detent and provide a signal.
- 7. The lead fixation tool of claim 6, wherein the signal is audible.
- 8. The lead fixation tool of claim 6, here the signal is a tactile sensation.
- 9. The lead fixation tool of claim 1, further comprising a handle depending from the distal portion.
- 10. The lead fixation tool of claim 1, wherein the lead pin engagement mechanism further includes an interference clamp.

- 11. The lead fixation tool of claim 10, wherein the interference clamp is axially aligned with the passage.
- 12. The lead fixation tool of claim 11, wherein the interference clamp is C-shaped.
- 13. A lead fixation tool comprising:means for gripping a lead; andmeans for aligning the lead with a passageway.
- 14. A tool comprising:

means for receiving a stylet;

means for receiving a lead aligned with the means for receiving the stylet; and

means for gripping the lead.

- 15. The tool of claim 14, further comprising: means for indicating a rotation of the tool.
- 16. The tool of claim 15, wherein the means for indicating rotation indicate rotation of a first portion of the tool relative to a second portion of the tool.
- 17. A lead fixation tool comprising:

a proximal portion having a guide passage disposed therethrough, wherein the guide passage includes a tapered portion having an opening and a lumen interface; and

a distal portion having a connector channel that is axially aligned with the guide passage;

an engagement collar disposed within the connector channel that is configured for gripping and axially aligned with the guide passage.

18. The fixation tool of claim 17, further comprising a handle depending from the distal portion.

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- 19. The fixation tool of claim 17, further comprising a gripping surface disposed on the proximal portion.
- 20. The fixation tool of claim 17, wherein the engagement collar is a resilient C-shaped clamp.
- 21. The fixation tool of clam 17, wherein the proximal portion is rotatably coupled with the distal portion.
- 22. The fixation tool of claim 21, wherein the engagement collar is coupled with the proximal portion.
- 23. The fixation tool of claim 17, further comprising a rotation indicator.
- 24. The fixation tool of claim 23, wherein the rotation indicator includes: a resilient arm having an actuator; and
- a detent, wherein rotation of the distal portion relative to the proximal portion causes the actuator to engage the detent and provide a signal.
- 25. The lead fixation tool of claim 24, wherein the signal is audible.
- 26. The lead fixation tool of claim 24, here the signal is a tactile sensation.
- 27. A lead fixation tool comprising:
- a housing having a generally circular cross section, the housing including a proximal portion and a distal portion, wherein the proximal portion and the distal portion are axially aligned;
- a guide passage for receiving stylet and extending between an opening in the proximal portion to a lumen interface, wherein the guide passage tapers from a larger diameter at the opening to a narrower diameter;
- a lead receiving channel disposed within the distal end for receiving at least a portion of a connector assembly of a lead;

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a connector pin channel disposed within the lead receiving channel for receiving a connector pin of the connector assembly and axially aligning the connector pin with the lumen interface; and

an engagement collar defining the connector pin channel and configured to grip the connector pin.

- 28. The lead fixation tool of claim 27, further comprising a handle depending from the distal portion in a plane that is perpendicular to an axis of rotation of the tool.
- 29. The lead fixation tool of claim 27, further comprising a gripping surface disposed over at least a portion of an exterior of the proximal portion.
- 30. The lead fixation tool of claim 29, wherein the gripping surface includes a plurality of ridges.
- 31. The lead fixation tool of claim 27, further comprising a directional indicator for indicating a direction of rotation to affect lead implantation.
- 32. The lead fixation tool of claim 27, wherein the proximal portion is rotatable relative to the distal portion.
- 33. The lead fixation tool of claim 32, further comprising a bearing forming an interconnection between the proximal portion and the distal portion.
- 34. The lead fixation tool of claim 32, further comprising a rotational indicator.
- 35. The lead fixation tool of claim 34, wherein the rotational indicator includes:
  - a resilient arm having an actuator; and
- a detent, wherein rotation of the distal portion relative to the proximal portion causes the actuator to engage the detent and provide a signal.

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- 36. The lead fixation tool of claim 35, wherein the resilient arm is coupled with the proximal portion and the detent is formed in the distal portion.
- 37. The lead fixation tool of claim 36, further comprising a window disposed on the distal portion that permits visual observance of the actuator engaging the detent.
- 38. The lead fixation tool of claim 35, wherein the signal is audible.
- 39. The lead fixation tool of claim 35, wherein the signal is a tactile sensation.
- 40. The lead fixation tool of claim 27, wherein the guide passage is configured to receive a portion of a handle of the stylet.
- 41. The lead fixation tool of claim 27, wherein the housing is aligned parallel to the connector pin during rotation of the tool.
- 42. A method of manipulating a lead comprising:

inserting a lead connector of a lead having a lumen opening into a distal portion of a fixation tool that grips the lead connector and aligns the lumen opening with a guide passage disposed within a proximal portion of the fixation tool;

inserting a stylet through the proximal portion of the fixation tool and into the lumen opening; and

rotating the fixation tool to cause rotation of an active fixation lead tip coupled with the lead.

- 43. The method of claim 42, wherein rotating includes rotating the proximal portion relative to the distal portion.
- 44. The method of claim 42, wherein the fixation tool remains parallel to the lead connector during rotation of the tool.